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BROMBERG & SUNSTEIN LLP 125 SUMMER STREET BOSTON, MA 02110-1618			TRUONG, CAM Y T	
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			2162	

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/921,986

Applicant(s)

EPSTEIN, BRUCE A.

Examiner

Cam Y T Truong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 15-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 15-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

*SHAHID ALAM*  
SHAHID ALAM  
PRIMARY EXAMINER

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### **DETAILED ACTION**

1. Claims 1-12 and 15-22 are pending in this Office Action.

Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action on 1/ 5/2005 now is withdrawn.

Applicant's arguments with respect to claims 1-12 and 15-22 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-12 and 15-22 are rejected under 35 U.S.C.101 because the language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practice application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C 101.

As regarding claim 1:

Claim 1 recites "a collaborative information system". However, the claim 1 fails to contain a computer that is used implemented the system so as to realize its functionality. Thus, the body of claim 1 is merely abstract idea and is being processed

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without any links to a practical result in the technology arts and without computer manipulation.

Claims 2-12 and 15-22 recite "a collaborative information system". However, these claims fail to contain a computer that is used to implement the system so as to realize its functionality. Thus, the bodies of these claims are merely abstract idea and is being processed without any links to a practical result in the technology arts and without computer manipulation.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gross (US 2002/0004735) in view of Lang et al (or hereinafter "Lang") (US 5867799).

As to claim 1, Gross teaches the claimed limitations:

"a metadata-enhanced database (metabase) for recording data and related metadata providing details about the data and contributors of the data" as vendor/product database 200 is used to storing attributes of products and products. Metadata is defined as title, subject, date, size, and author of a file. Thus, attributes such as product ID, vendor ID, product name are presented as metadata. Since

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Vendor/product database stores attributes of products, thus, the vendor/product database is represented as a metadata-enhanced database. The attributes of products are represented as related metadata (page 7, col. Right, lines 30-56).

Gross does not explicitly teach the claimed limitation "metadata enabling a metabase user to assess the reliability of the data and the contributors of the data".

Lang teaches the proposed informons of client profiles are presented to user U for review. User U reads and rates each selected A found in Z. The feedback from U can consist of a rating for how interesting U found A to b, as well as one or more of the following:

Opinion feedback: Did U agree, disagree, or have no opinion regarding the position of A?

Credibility Feedback: Did U find the facts, logic, sources, and quotes in A to be truthful and credible or not?

Informon Qualities: How does the user rate the informons qualities, for example, "interestingness," credibility, funniness, content value, writing quality, violence content, sexual content, profanity level, business importance, scientific merit, surprise/unexpectedness of information content, artistic quality, dramatic appeal, entertainment value, trendiness/importance to future directions, and opinion agreement. Specific Reason Feedback: Why did the user like or dislike A? Because of the authority?; Because of the source? Because A is out-of-date (e.g. weather report from 3 weeks ago)? Because the information

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contained in A has been seen already? (I.e., the problem of duplicate information delivery). Categorization Feedback: Did U liked A? Was it placed within the correct M and Z? Such multi-faceted feedback queries can produce rich feedback profiles from U that can be used to adapt each of the profiles used in the filtering process to some optimal operating point. When a user U evaluates the informons of a client, the user U evaluates the content information and client of the content information. Informons is represented as metadata. The client is represented as contributor (col. 19, lines 20-50).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Lang's teaching of informons allows a user to evaluate credibility or reliability of the content information and client of content information to Gross's system in order to provide a system that allows a user to search/retrieve high quality data or credibility information via Internet efficiently and further provide feedback's user for data of contributors so that contributors improve or increase trustworthiness of their data.

As to claim 2, Gross discloses the claimed limitation subject matter in claim 1, except the claimed limitation "wherein the reliability of the data is assessed by evaluating the reliability of its contributors and the reliability of the contributors is assessed by evaluating the reliability of the data". Lang teaches the proposed informons of client profiles are presented to user U for review. User U reads and rates

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each selected A found in Z. The feedback from U can consist of a rating for how interesting U found A to be, as well as one or more of the following:

Opinion feedback: Did U agree, disagree, or have no opinion regarding the position of A?

Credibility Feedback: Did U find the facts, logic, sources, and quotes in A to be truthful and credible or not?

Informon Qualities: How does the user rate the informons qualities, for example, "interestingness," credibility, funniness, content value, writing quality, violence content, sexual content, profanity level, business importance, scientific merit, surprise/unexpectedness of information content, artistic quality, dramatic appeal, entertainment value, trendiness/importance to future directions, and opinion agreement. Specific Reason Feedback: Why did the user like or dislike A? Because of the authority?; Because of the source? Because A is out-of-date (e.g. weather report from 3 weeks ago)? Because the information contained in A has been seen already? (I.e., the problem of duplicate information delivery). Categorization Feedback: Did U like A? Was it placed within the correct M and Z? Such multi-faceted feedback queries can produce rich feedback profiles from U that can be used to adapt each of the profiles used in the filtering process to some optimal operating point. When a user U evaluates the informons of a client, the user U evaluates the content information and client of the content information. Informons is represented as metadata. The client is represented as contributor (col. 19, lines 20-50).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Lang's teaching of informons allows a user to evaluate credibility or reliability of the content information and client of content information to Gross's system in order to provide a system that allows a user to search/retrieve high quality data or credibility information via Internet efficiently and further provide feedback's user for data of contributors so that contributors improve or increase trustworthiness of their data.

As to claim 3, Gross teaches the claimed limitation "wherein the metabase is populated and maintained by the metabase users" as updating the information in the vendor/product database (page 4, col. Right, lines 22-30).

As to claim 4, Gross teaches the claimed limitation "automated versioning means for tracking and maintaining a history of each datum recorded in the metabase" as the tracking module 220 tracks and updates history database 215 (page 6, col. Right, lines 30-48).

As to claim 6, Gross teaches the claimed limitation "information gathering means for obtaining information from various sources" as vendor/product database obtains information from various vendors (figs. 1-3N).



As to claim 7, Gross does not explicitly teach the claimed limitation "wherein the metabase comprises reliability assessment means for assessing the reliability of the data and the metabase users". Lang teaches the proposed informons of client profiles are presented to user U for review. User U reads and rates each selected A found in Z. The feedback from U can consist of a rating for how interesting U found A to b, as well as one or more of the following:

Opinion feedback: Did U agree, disagree, or have no opinion regarding the position of A?

Credibility Feedback: Did U find the facts, logic, sources, and quotes in A to be truthful and credible or not?

Informon Qualities: How does the user rate the informons qualities, for example, "interestingness," credibility, funniness, content value, writing quality, violence content, sexual content, profanity level, business importance, scientific merit, surprise/unexpectedness of information content, artistic quality, dramatic appeal, entertainment value, trendiness/importance to future directions, and opinion agreement. Specific Reason Feedback: Why did the user like or dislike A? Because of the authority?; Because of the source? Because A is out-of-date (e.g. weather report from 3 weeks ago)? Because the information contained in A has been seen already? (I.e., the problem of duplicate information delivery). Categorization Feedback: Did U liked A? Was it placed within the correct M and Z? Such multi-faceted feedback queries can produce rich feedback profiles from U that can be used to adapt each of the profiles used in the filtering

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process to some optimal operating point. When a user U evaluates the informons of a client, the user U evaluates the content information and client of the content information. Informons is represented as metadata. The client is represented as contributor (col. 19, lines 20-50).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Lang's teaching of informons allows a user to evaluate credibility or reliability of the content information and client of content information to Gross's system in order to provide a system that allows a user to search/retrieve high quality data or credibility information via Internet efficiently and further provide feedback's user for data of contributors so that contributors improve or increase trustworthiness of their data.

As to claim 8, Gross teaches the claimed limitation "automated help means for resolving metabase user queries" as once a consumer has identified a particular product or service, the computer system displays to the consumer a list of offerings from a plurality on-line vendors. This information shows the system automatically resolve user's queries to display the result to a user (page 4, lines 50-67).

As to claim 9, Gross teaches the claimed limitation "customizable retrieval means for enabling a metabase user to specify various criteria for retrieving data" as a user can select any price range to search and the system will return a result based on user's request (figs. 4-5).

As to claim 10, Gross teaches the claimed limitation “user identification information; user personal information; user performance information; information characterization information; contributor information; source (citation) information; feedback information; implicit information; historical information; user rankings obtained from one or more ranking authorities; opinion information from contributors and users of the data regarding the reliability of the data and the users; and solicited information regarding the reliability of the data and the users” as vendor ID is represented as user identification information (fig. 3D).

As to claim 11, Gross teaches the claimed limitation “browser means for interacting with web-based entities” as a user interact with the websites of the on-line vendors (figs. 4-5).

As to claim 19, Gross teaches the claimed limitation “wherein a metabase user is permitted to create a new metabase” as (page 4, col. Right, lines 50-67).

As to claim 20, Gross teaches the claimed limitation “wherein the metadata includes information regarding a contributor or data contributed by the contributor, the information provided explicitly by the contributor or obtained implicitly by the metabase” as (page 6, col. Left, lines 36-67, figs. 3A-3R).

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As to claim 22, Gross teaches the claimed limitation "wherein the metabase includes metabase structures including tables and fields within the tables" as (figs. 3A-3R).

6. Claims 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gross (US 2002/0004735) in view of Lang and further in view of Robertson (US 6269369).

As to claim 5, Gross discloses the claimed limitation subject matter in claim 1, except the claimed limitation "notification means for notifying interested metabase users regarding changes to metabase contents ". Robertson teaches whenever a second user updates any information in any data field of his/her profile, the information in that field is automatically notified or maintained in the first users' profiles whom they has permission to view the information for ensuring that they have the most up to date contact information (see col. 3, lines 12-20).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Robertson's teaching of whenever a second user updates any information in any data field of his/her profile, the information in that field is automatically notified or maintained in the first users' profiles whom they has permission to view the information to the Gross's system and Lang's system in order to allow a user to save time for monitoring updated data fields or interests of other users and further to provide a system whereby users can participate in discussion groups with others interested in same topic.

As to claim 12, Gross teaches the claimed limitations:

“wherein the metabase uses an editable data markup language for creating and using the metabase, wherein the editable data markup language comprises: means for defining metabase structures” as the web documents are encoded using HTML. The system create vendor/product database which store information about products and services directly (page 4, col. Right, lines 49-67; page 3, col. Left, lines 50-60);

“means for editing metabase structures” as updating database (page 4, col. Left, lines 23-30);

“means for contributing information to metabase structures” as database 200 contains products and attributes of products (page 7, col. Right, lines 50-55, fig. 3J);

“means for retrieving information from the metabase structures” retrieving products from database 200 (figs. 4-5);

“means for combining data from multiple metabases” as receiving all information from vendors and storing in database 200 (page 4, lines 20-60).

Gross does not explicitly teach the claimed limitation “means for automatically updating one metabase from another metabase”. Robertson teaches whenever a second user updates any information in any data field of his/her profile, the information in that field is automatically notified or maintained in the first users’ profiles whom they has permission to view the information for ensuring that they have the most up to date contact information (see col. 3, lines 12-20).

It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Robertson's teaching of whenever a second user updates any information in any data field of his/her profile, the information in that field is automatically notified or maintained in the first users' profiles whom they has permission to view the information to the Gross's system and Lang's system in order to allow a user to save time for monitoring updated data fields or interests of other users and further to provide a system whereby users can participate in discussion groups with others interested in same topic.

7. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gross (US 2002/0004735) in view of Lang and further in view of Szlam et al (or hereinafter "Szlam") (UPS 6362838) and Neubauer et al (or hereinafter "Neubauer") (USP 6148308).

As to claim 15, Gross and Lang disclose the claimed limitation subject matter in claim 1, except the claimed limitation "wherein a metabase user is permitted to modify data contributed by another metabase user, wherein the history includes the original data and metadata identifying details about the modified data and its contributor". Szlam teaches by opening an object or selecting that graphical object for editing, the user can view and modify the attributes for that screen object (col. 13, lines 20-22). Neubauer teaches the history record that contains previous version and modified previous version (col. 4, lines 40-65; fig. 5)

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It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Szlam's teaching of by opening an object or selecting that graphical object for editing, the user can view and modify the attributes for that screen object and Neubauer's teaching of the history record that contains previous version and modified previous version to Gross and Lang in order to consolidate various types of information form multiple sources into a single, coherent presentation and save memory space for storing a new inforamiton of a field and to monitor a record file.

8. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gross (US 2002/0004735) in view of Lang and further in view Szlam.

As to claim 16, Gross and Lang disclose the claimed limitation subject matter in claim 1, except the claimed limitation "wherein a metabase user is permitted to modify metabase structures defined by the metabase user or another metabase user".

Szlam teaches the user specifies that a change is to be made to the address data entry field 36, which causes a dialog box to appear, or by pulling down a menu, selecting edit, or by pressing a button 21, and then selecting the data entry field (col. 14, lines 60-67).

It would have been obvious to a person of an ordinary skill in the invention was made to apply Szlam's teaching of the user specifies that a change is to be made to the address data entry field 36, which causes a dialog box to appear, or by pulling

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down a menu, selecting edit, or by pressing a button 21, and then selecting the data entry field to Gross and Lang in order to provide a new information for each record field following user's desire.

As to claim 17, Gross and Lang disclose the claimed limitation subject matter in claim 1, except the claimed limitation "wherein the metabase user is permitted to create a new data field in the metabase". Szlam teaches a user is permitted to create another field of a record (fig. 2A-2G).

It would have been obvious to a person of an ordinary skill in the invention was made to apply Szlam's teaching of permitting a user to create field 36 of a record to Gross and Lang to monitor a record in a database.

9. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gross (US 2002/0004735) in view of Lang and further in view of Szlam and Crim (US 2002/0152189 A1).

As to claim 18, Gross and Lang disclose the claimed limitation subject matter in claim 1, except the claimed limitation "wherein the metabase user is permitted to delete an existing data field from the metabase". CRIM teaches user can delete a field of a record (fig. 7, page 4, col. Right, lines 1-20).



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It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply CRIM's teaching deleting a field of a record to Gross and Lang to display a record in attractive format following user's desiser.

10. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gross (US 2002/0004735) in view of Lang et al (or hereinafter "Lang") (USP 5765138) and further in view of Lang et al (or hereinafter "Lang420") (USP 6314420).

As to claim 21, Gross and Lang disclose the claimed limitation subject matter in claim 1, except the claimed limitation "a ranking authority for generating a user ranking representing the reliability of a contributor, the ranking authority evaluating the reliability of the contributor based upon metadata relating to the contributor's contributions to the metabase according to criteria provided by a metabase user".

Gross teaches as vendor/product database 200 is used to storing attributes of products and products. Metadata is defined as title, subject, date, size, and author of a file.

Thus, attributes such as product ID, vendor ID, product name are presented as metadata. Since Vendor/product database stores attributes of products, thus, the vendor/product database is represented as a metadata-enhanced database. The attributes of products are represented as related metadata (page 7, col. Right, lines 30-56). Lang teaches Lang teaches the proposed informons of client profiles are presented to user U for review. User U reads and rates each selected A found in Z. The feedback from U can consist of a rating for how interesting U found A to b, as well as one or more of the following:

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Opinion feedback: Did U agree, disagree, or have no opinion regarding the position of A?

Credibility Feedback: Did U find the facts, logic, sources, and quotes in A to be truthful and credible or not?

Informon Qualities: How does the user rate the informons qualities, for example, "interestingness," credibility, funniness, content value, writing quality, violence content, sexual content, profanity level, business importance, scientific merit, surprise/unexpectedness of information content, artistic quality, dramatic appeal, entertainment value, trendiness/importance to future directions, and opinion agreement. Specific Reason Feedback: Why did the user like or dislike A? Because of the authority?; Because of the source? Because A is out-of-date (e.g. weather report from 3 weeks ago)? Because the information contained in A has been seen already? (I.e., the problem of duplicate information delivery). Categorization Feedback: Did U liked A? Was it placed within the correct M and Z? Such multi-faceted feedback queries can produce rich feedback profiles from U that can be used to adapt each of the profiles used in the filtering process to some optimal operating point. When a user U evaluates the informons of a client, the user U evaluates the content information and client of the content information. Informons is represented as metadata. The client is represented as contributor (col. 19, lines 20-50). Lang420 teaches users can sort documents which they have read from best to worst (col. 24, lines 50-55).

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It would have been obvious to a person of an ordinary skill in the art at the time the invention was made to apply Lang420' s teaching of users can sort documents to Gross and Lang in order to indicate how good quality of a document or a product.

***Conclusion***

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure  
Lang (US 6775664).

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***Contact Information***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T Truong whose telephone number is (571) 272-4042. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cam-Y Truong  
Patent Examiner  
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11/3/2004

  
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PRIMARY EXAMINER